

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of
Paul Trpkovski et al.

Serial No.: 10/076,211

Filed: February 12, 2002

For: IMPROVED MASKING FOR
INSULATING GLASS UNITS,
MONOLITHIC PANES, AND
OTHER SUBSTRATES

) Examiner: Phi Dieu Tran A

) Art Unit: 3637

) Atty. Docket No. 44046.103.203.21.2

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APPEAL BRIEF (37 C.F.R § 41.37)

This is an appeal of the Examiner's final rejection of claims 1, 6, 8-12, 48-51, and 55-62,
in the Office Action issued on November 17, 2004.

REAL PARTY IN INTEREST.

This application has been assigned to Cardinal IG Company.

RELATED APPEALS AND INTERFERENCES.

None.

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STATUS OF CLAIMS.

Claims 1, 6, 8-12, 48-51, and 55-62 are pending in this case and have been finally rejected. A copy of the appealed claims is attached as Appendix A. Claims 2-5, 7, 13-47, and 52-54 have been canceled without prejudice.

STATUS OF AMENDMENTS.

Since the Examiner issued the final rejection, Applicants filed their Notice of Appeal on May 17, 2005, without further amendment.

SUMMARY OF CLAIMED SUBJECT MATTER.

The subject matter defined in independent claim 1 finds support in both the specification and the drawings. The “transparent window pane having first and second generally-opposed major surfaces” finds support, for example, at page 6, line 14 through page 7, line 10 and in Figure 1 as reference number 102. The “transparent pane being sized and shaped to be mounted in a frame configured to receive at least one edge of the pane” finds support, for example, at page 12, line 13 through page 13, line 3. The “transparent pane having a removable protective covering comprising a plurality of strips of masking material that are disposed over a central portion of said first surface and that extend across a length of said first surface or across a width of said first surface, said central portion spanning at least 70% of said first surface,” finds support, for example, at page 7, lines 1-10 and generally in Figure 1. The “first surface having an unmasked peripheral apron” finds support, for example, at page 16, lines 13-21 and in Figure 1 as reference number 124. The “protective covering having readily accessible means for

removing the protective covering from the window pane,” finds support, for example, at page 18, lines 1-11 and in Figure 1 as reference number 16. The masking material being “a masking film that is transparent or translucent,” finds support, for example, at page 21, lines 1-6. The “strips of transparent or translucent masking film” being “disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip, such that the overlapped strips of transparent or translucent masking film define a plurality of exposed lateral edges that form said readily accessible means for removing the protective covering from the window pane,” finds support, for example, at page 15, line 16 through page 18, line 11 and generally in Figure 1. The “plurality of sequentially overlapped strips of masking material” that “are each adhered to said first major surface by a masking adhesive, wherein the overlapped strips are affixed to one another, and wherein the overlapped strips are affixed to one another by being adhesively joined” finds support, for example, at page 17, lines 13-22, and page 20, line 15 through page 21, line 22.

The subject matter defined in independent claim 48 finds support in both the specification and the drawings. The “glazing assembly comprising a transparent pane and a frame to which the pane is mounted” finds support, for example, at page 31, lines 3-12 and generally in Figure 7A. The frame receiving “an edge of the pane” and the assembly including “glazing compound between the frame and the pane” find support, for example, at page 16, line 22 through page 17, line 12 and generally in Figures 7A-7C. The “transparent pane having first and second generally-opposed major surfaces” finds support, for example, at page 6, line 14 through page 7, line 10 and in Figure 1 as reference number 102. The “transparent pane having a protective covering disposed over a portion of said first surface” finds support, for example, page 16, lines 13-21, and in Figure 2 as reference number 20. The “protective covering comprises a plurality of

strips of masking material” and the “protective covering comprising at least one piece of masking material” find support, for example, at page 13, line 15 through page 14, line 3 and in Figure 1 as reference numbers 130A-130D. The “first surface having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the pane” finds support, for example, at page 16, lines 13-21 and in Figure 1 as reference number 124. The masking material being a “flexible masking film” finds support, for example, at page 21, lines 7-13. The masking material being “sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame but does not extend so far beneath the frame as to engage the glazing compound” finds support, for example, at page 16, lines 13-21 and page 27, lines 1-12.

The subject matter defined in independent claim 56 finds support in both the specification and the drawings. The “glazing assembly comprising an insulating glass unit and a frame to which the insulating glass unit is mounted” finds support, for example, at page 31, lines 3-12 and generally in Figure 7A. The “insulating glass unit comprising first and second panes each having generally-opposed inner and outer surfaces” finds support, for example, at page 6, line 14 through page 7, line 18 and in Figure 2 as reference numbers 14 and 24. The “first and second panes each having at least one edge received in the frame” and the glazing compound being “located between the frame and the outer surface of the first pane but not between the frame and outer surface of the second pane” find support, for example, at page 16, line 22 through page 17, line 12 and generally in Figures 7A-7C. The protective covering being “disposed over a portion of the outer surface of the second pane” finds support, for example, at page 7, lines 19-21 and in Figure 2 as reference number 20. The protective covering comprising “a plurality of strips of

masking material” and the “protective covering comprising at least one piece of masking material” find support, for example, at page 13, line 15 through page 14, line 3 and in Figure 1 as reference numbers 130A-130D. The “outer surface of the second pane having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the second pane” finds support, for example, at page 16, lines 13-21 and in Figure 1 as reference number 124. The masking material being “a flexible masking film” finds support, for example, at page 21, lines 7-13. The masking material being “sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame” finds support, for example, at page 16, lines 13-21.

The subject matter defined in independent claim 61 finds support in both the specification and the drawings. The “transparent window pane having a square or rectangular shape with four sides and having first and second generally-opposed major surfaces” finds support, for example, at page 18, lines 17-19 and in Figure 1 as reference number 102. The “transparent pane being sized and shaped to be mounted in a frame configured to receive at least one edge of the pane” finds support, for example, at page 12, line 13 through page 13, line 3. The “transparent pane having a removable protective covering comprising a plurality of strips of masking material disposed over a central portion of said first surface” and the “central portion spanning at least 70% of said first surface” find support, for example, at page 7, lines 1-10 and generally in Figure 1. The “first surface having an unmasked peripheral apron” finds support, for example, at page 7, lines 4-5 of the application and in Figure 1 as reference number 102. The “protective covering having readily accessible means for removing the protective covering from the window pane” finds support, for example, at page 18, lines 1-11 and in Figure 1 as reference number 16. The

“plurality of strips of masking material” being “adhered to said first major surface by a masking adhesive” finds support, for example, at page 20, lines 15-23. The “each strip of masking material” having “a longitudinal axis and lateral edges that are parallel to two sides of the pane and perpendicular to the other two sides of the pane” finds support, for example, at page 20, lines 8-14 and generally in Figure 3. The masking material being “a masking film that is transparent or translucent” finds support, for example, at page 21, lines 1-6. The “strips of transparent or translucent masking film” being “disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip such that a plurality of the strips each have a concealed lateral edge covered by an adjacent strip and such that the overlapped strips of transparent or translucent masking film define a plurality of exposed lateral edges that form said readily accessible means for removing the protective covering from the window pane” finds support, for example, at page 16, line 13 through page 18, line 11 and generally in Figure 1. The “overlapped strips” being “affixed to one another” and the “overlapped strips” being “affixed to one another by being adhesively joined” find support, for example, at page 17, lines 13-22.

The subject matter defined in independent claim 62 finds support in both the specification and the drawings. The “glazing assembly comprising a transparent pane and a frame to which the pane is mounted” finds support, for example, at page 31, lines 3-12 and generally in Figure 7A. The frame comprising “vinyl-covered wood” or having “a tubular construction of metal or metal alloy” finds support, for example, at page 31, lines 13-23. The frame receiving “an edge of the pane” and the assembly including “glazing compound between the frame and the pane” find support, for example, at page 16, line 22 through page 17, line 12, page 29, line 14 through page 30, line 8 and generally in Figures 7A-7C. The “transparent pane having first and second

generally-opposed major surfaces” finds support, for example, at page 6, line 14 through page 7, line 10 and in Figure 1 as reference number 102. The “transparent pane having a protective covering disposed over a portion of said first surface” finds support, for example, at page 7, lines 19-21 and in Figure 2 as reference number 20. The “first surface having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the pane” finds support, for example, at page 16, lines 13-21 and in Figure 1 as reference number 124. The “protective covering comprising at least one piece of masking material” finds support, for example, at page 13, line 15 through page 14, line 3 and in Figure 1 as reference numbers 130A-130D. The masking material being “a flexible masking film” finds support, for example, at page 21, lines 7-13. The masking material being “sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame but does not extend so far beneath the frame as to engage the glazing compound” finds support, for example, at page 16, lines 13-21.

GROUND FOR REJECTION TO BE REVIEWED ON APPEAL.

Claims 1, 6, 12, and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. (U.S. Patent No. 5,866,260) in view of Eckart (U.S. Patent No. 3,837,949) and Tachauer (U.S. Publication No. 2003/0070391).

Claims 8-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. in view of Eckart and Tachauer as applied to claim 1, and further in view of Smith et al. (U.S. Patent No. 5,735,089).

Claims 48-51, and 55 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. in view of Tachauer, Smith et al., and Emmanuel (U.S. Patent No. 5,836,119).

Claim 56 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. in view of Smith et al. in view of Emmanuel and Tachauer.

Claims 57-60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. in view of Smith et al., Emmanuel, and Tachauer as applied to claim 56, and further in view of Kupec et al. (U.S. Patent No. 2,672,122).

Claim 62 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Adams Jr. in view of Smith et al. in view of Emmanuel.

Copies of each of the above-identified references (i.e., Adams Jr., Eckart, Tachauer, Smith et al., Emmanuel, and Kupec et al.) are attached in the Evidence Appendix.

ARGUMENT.

A. The Board Should Reverse Examiner's Rejection of Claims 1, 6, 12, and 61 as Obvious over Adams Jr. in view of Eckart and Tachauer.

Examiner's rejection of claims 1, 6, 12, and 61 is improper. Examiner impermissibly bases the rejection on a reference—Tachauer—that is outside the scope of pertinent prior art. Moreover, even if all three cited references were pertinent prior art, Examiner has failed to carry his burden of showing that one skilled in the art would be motivated to combine them in a way that produced the inventions of the rejected claims. Applicants submit that a *prima facie* case of obviousness cannot be based upon Tachauer alone or in combination with any reference cited by

Examiner. Accordingly, the Board should reverse Examiner's rejection and allow claims 1, 6, 12, and 61.¹

1. Examiner's Rejection of Claims 1, 6, 12, and 61 Is Improper Because It Relies on a Reference that Is Outside the Scope of Pertinent Prior Art.

According to Federal Circuit law, only prior art that is analogous to the claimed invention is within the scope of prior art that is relevant in an obviousness determination. *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Prior art is analogous when it (a) "is from the same field of endeavor" or (b) "is reasonably pertinent to the particular problem with which the invention is involved." *Id.* at 658-59. Because Tachauer satisfies neither of those criteria, it is non-analogous art and, therefore, is not relevant. Accordingly, Examiner's reliance on Tachauer is improper, and the Board should reverse the rejection of claims 1, 6, 12, and 61.²

Clearly, Tachauer is not from the same field of endeavor. The field of endeavor of the inventions of claims 1, 6, 12, and 61 is transparent window panes and more specifically transparent window panes carrying or having removable protective coverings or maskings. (Application at p. 1, ll. 6-9.) In stark contrast, Tachauer's field of endeavor is "fastening objects together with [wide] membranes." (Tachauer at ¶ 2.) As examples, Tachauer provides, not applications involving masking of windows, but "geotextiles to protect against water penetration or erosion, roof membranes and building wrap materials to protect against rain and wind, and

¹ By setting forth these bases for reversal of Examiner's rejection of claims 1, 6, 12, and 61, Applicants do not mean to imply that these are the only bases for reversal.

² It is worth emphasizing that without Tachauer, Examiner could not have maintained a rejection based solely on the combination of Adams Jr. and Eckart. Applicants submit that they overcame this rejection in their response of August 25, 2004. This is evidenced by the fact that Examiner relied on only Adams and Eckart in a previous office action (see Office Action Dated February 25, 2004) and presumably could not maintain the rejection without adding Tachauer in response to Applicants' remarks.

membranes as well as sheet, batt and board materials that serve as vapor barriers and sound barriers.” (Tachauer at ¶ 3.)

In Tachauer, “applications of the membrane of the invention are directed to broad area covers. The membrane is typically placed on an object with the hooks or other fasteners” (Tachauer at ¶ 93.) Further, an express aspect of the invention not limited to any specific embodiment is “in general, the concept of providing a novel protective membrane bearing a field of fasteners.” (Tachauer at ¶ 95.) Tachauer’s title – “Fastening with Wide Fastening Membranes” – is another indicator of its field of endeavor.

The teaching of Tachauer and the claimed methods are concerned with application of wide membranes for use in covering of broad areas, such as building walls, exteriors and structures, an installed roof covering, subfloors and floor coverings, vapor barriers, affixing decorative coverings to a building interior, and enclosing spaces. Tachauer is not concerned with temporary masking of glass panes. Thus, because Tachauer does not disclose applications involving temporarily masking the surfaces of a window pane or window panes bearing temporary maskings, Tachauer is not in the same field of endeavor as the inventions of claims 1, 6, 12, and 61.

Moreover, Tachauer is not reasonably pertinent or relevant to the particular problem with which the inventions of claims 1, 6, 12, and 61 are involved because Tachauer is aimed at solving a problem that is entirely different from the problem addressed by claims 1, 6, 12, and 61. As the Federal Circuit has instructed, “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the

matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *Clay*, 966 F.2d at 659.

The present application states the problem addressed by the inventions of claims 1, 6, 12, and 61 as follows:

The panes of an IG unit, as well as monolithic panes, can be damaged or soiled while being transported to a building site, or during the installation and building process. The installation and building process typically involves the efforts of a variety of crafts people, such as carpenters, masons, and painters. During such processing, the pane or panes can be inadvertently scratched or covered with paint, stain, or other finishing materials. Therefore, it is advantageous to temporarily mask the surface of a pane during periods of transportation, installation, and building."

(Application at p.2, ll. 1-7.) Applicants have addressed this problem by applying a novel removable masking to monolithic panes and panes of insulating glass units prior to their being mounted in a frame. The masked panes may bear the masking during processing and later mounting in a frame to form an assembly and being transported and installed into a building.

There have been many attempts to provide protection to window panes during processing while allowing the protection to be removed to allow the window panes to perform their ordinary function once the processing is completed. Adams Jr. and Eckart are examples of such attempts. Accordingly, several references may have "logically commended" themselves to a skilled artisan's attention. But Tachauer is not one of them.

In stark contrast to the problem addressed in the present invention, Tachauer is concerned with—not merely the wide membrane applications listed above—but with "fastening objects together with such membranes." (Tachauer at ¶ 2.) In the various embodiments and aspects detailed in the summary of the invention, references to the use of fastener elements, particularly

hook and loop type fasteners, abound. (Tachauer at ¶¶ 5-56.³) Indeed, every claim of Tachauer includes a limitation directed to hook and loop fasteners, expressly or by dependency. This is not surprising given the fact that Tachauer has been assigned to Velcro Industries B.V.

A reference concerned with fastening membranes together with hook and loop type fasteners would clearly not have logically commended itself to the attention of an artisan skilled in Applicants' field. Thus, Tachauer is not reasonably pertinent to the particular problem with which claims 1, 6, 12, and 61 are involved. A glass or window manufacturer's attention simply would not be logically drawn to Tachauer.

Because Tachauer is neither from the same field of endeavor as the inventions of claims 1, 6, 12, and 61 nor reasonably pertinent to the particular problem with which they are involved, Tachauer is "too remote to be treated as prior art." *Clay*, 966 F.2d at 658 (internal quotations omitted). Accordingly, the Board should reverse Examiner's rejection of claims 1, 6, 12, and 61 because they are based on Tachauer, which is an improper reference.

2. Examiner Has Not Established the Necessary Motivation to Combine Adams Jr., Eckart, and Tachauer.

Even assuming, arguendo, that all of the references cited by Examiner against claims 1, 6, 12, and 61 are within the scope of pertinent prior art, Examiner has not met his burden of showing that one skilled in the art would be motivated to combine them. And, the references themselves contain no teaching or suggestion that would provide such motivation.

Examiner concedes that Adams Jr. is deficient because it does not teach or disclose a plurality of overlapping strips disposed over a central portion of the first surface of a glass pane

³ Additional aspects of the invention are summarized, e.g., the use of protective membranes with molded projections and application of heat. (Tachauer at ¶¶ 57-58.)

and seeks to cure the deficiencies by combination with Eckart and Tachauer. However, Examiner provides no basis for his contention that one skilled in the art would be motivated to combine Adams Jr. with Eckart and Tachauer. In support of the combination, Examiner solely provided unsupported, conclusory statements: (1) “having the multiple strips of masking material disposed over a large central portion of a first surface would protect the central portion of the structure from external damaging forces as taught by Tachauer” and (2) “having the strips extending substantially in parallel across the first surface of the pane, the strips being adhesively attached to the first major surface by a masking adhesive . . . as taught by Eckart.”⁴ (Final Office Action at 3-4.) But neither of these statements amount to motivation or teaching or suggestion that would lead the skilled artisan to the proposed combination except, possibly, by hindsight. Accordingly, Examiner has not carried his burden of showing a motivation to combine, and the Board should reverse Examiner’s rejection of claims 1, 6, 12, and 61.

⁴ The following sentence is the entire extent of Examiner’s attempt to show a motivation to combine the cited references:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Adams Jr. et al to show the protective covering having a plurality of strips of masking material that are disposed over a central portion of the first surface, the strips of masking material being disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip as taught by Tachauer, the strips extending substantially in parallel across the first surface of the pane, the strips being adhesively attached to the first major surface by a masking adhesive, the overlapped strips of masking film defining a plurality of exposed lateral edges that form readily accessible means, the strips are affixed to one another by adhesive as taught by Eckart Jr. *because* having the multiple strips of masking material disposed over a large central portion of a first surface would protect the central portion of the structure from external damaging forces as taught by Tachauer, and having the strips extending substantially in parallel across the first surface of the pane, the strips being adhesively attached to the first major surface by a masking adhesive, the overlapped strips of masking film defining a plurality of exposed lateral edges that form readily accessible means, the strips affixed to one another by adhesive would result in the easy covering of the glass pane for a paint job and removal of the masked material from the window pane when the paint job is done as taught by Eckart Jr.

(Final Office Action at 3-4 (emphasis added).)

It is a groundless assertion to say that one skilled in the field of the present inventions would recognize Tachauer's multiple strips of wide membranes with fasteners as providing enhanced protection from external damaging forces and be led to replace the single sheet 22a of Adams Jr. or the single sheet 40 of Eckart with multiple masking strips claimed by Applicants. While Tachauer does describe the multiple membrane sheets' ability to protect covered surfaces from, e.g., water penetration (Tachauer at ¶ 3.), it makes no mention whatsoever about the multiple membrane sheets providing greater protection than a single membrane sheet stretched across the entire covered surface. Applicants submit that Tachauer uses multiple wide membrane sheets rather than a single membrane sheet because the surfaces to be covered (e.g., a roof) are generally too large for a single membrane sheet. Thus, Examiner has not shown that, based on Tachauer, one skilled in the art would regard multiple strips as providing superior protection compared with a single sheet or that one would be led to the substitution for window pane applications. Instead, one skilled in the art would neither consider Tachauer nor look to its teaching as suggesting use of overlapping strips in place of Adams Jr.'s or Eckart's single sheet.

It is also groundless to say that one skilled in the art would find overlapping, parallel window pane masking strips of any kind in Eckart and be motivated to combine them with Adams Jr. Examiner's statements that Eckart discloses "strips extending substantially in parallel across the first surface of the pane" and "strips being adhesively attached to the first major surface by a masking adhesive" find no support in the record. (Final Office Action at 4.)

In fact, in Eckart, "the glass panes 38 of the main window sashes 39 are completely masked or covered with precut masking sheets 40, FIG. 6, preferably formed of heavy cardboard." (Eckart at 3:7-10.) The precut cardboard masking sheets 40 are single sheets

applied to each glass pane 38 of the standard house window 34 after assembly of the window and after the window is installed in a house or building structure. These precut masking sheets have two holes over which pressure-sensitive adhesive tape is applied, thereby securing the sheets to the panes. (*Id.* at 3:10-17.) Thus, only a single precut masking sheet and the pressure-sensitive adhesive tape contact each of the glass panes.

Eckart does disclose adhesive strips 15 formed of a “masking paper” with adhesive coated areas along its longitudinal edges, (*id.* at 2:4-11), but these strips are designed to protect a house’s *siding* surrounding the window frame (*id.* at 2:66-3:4) and the *channel* in which the storm sash slides (*id.* at 3:36-40), not the glass panes. The strips 15 are not adhesively attached to the window surface and do not extend across the window surface.

Contrary to Examiner’s assertions, Eckart does not disclose a plurality of substantially parallel masking strips extending across the first surface of a pane. Eckart’s means for masking a window pane is no different than Adams Jr.’s—a single precut sheet. One skilled in the art would find nothing advantageous about combining Adams Jr. with Eckart. Accordingly, Examiner has failed to carry his burden of showing that one skilled in the art would be motivated to combine Adams Jr. with Eckart and Tachauer. Further, Applicants submit that if the teachings of the cited references were combined as suggested by Examiner, the invention as claimed would not be the result. Thus, the Board should reverse Examiner’s rejection of claims 1, 6, 12, and 61.

B. The Board Should Reverse Examiner's Rejection of Claims 8-11 as Obvious over Adams Jr. in View of Eckart and Tachauer as Applied to Independent Claim 1, and Further in View of Smith et al.

Because claims 8-11 depend from claim 1, and because claim 1 is nonobvious over the combination of Adams Jr., Eckart, and Tachauer, as demonstrated above, Examiner's rejection of claims 8-11 is improper. Accordingly, the Board should reverse the rejection and allow claims 8-11.⁵

C. The Board Should Reverse the Examiner's Rejection of Claims 48-51 and 55 as Obvious over Adams Jr. in view of Tachauer, Smith et al., and Emmanuel.

Examiner's rejection of claims 48-51 and 55 is improper. Again, Examiner impermissibly bases the rejection on Tachauer, which is non-analogous art. Additionally, Examiner has failed to carry his burden of showing that one skilled in the art would be motivated to combine the *four* cited references so as to produce the inventions of the rejected claims. Accordingly, the Board should reverse Examiner's rejection and allow claims 48-51 and 55.

1. Examiner's Rejection of Claims 48-51 and 55 Is Improper Because Tachauer Is an Improper Reference.

As has been demonstrated above in section A.1, Tachauer is not within the scope of pertinent prior art, and any rejection based on it should be reversed. Because Tachauer is neither from the same field of endeavor as the inventions of claims 48-51 and 55 nor reasonably pertinent to the particular problem with which the inventions of claims 48-51 and 55 are involved, Tachauer is "too remote to be treated as prior art." *Clay*, 966 F.2d at 658 (internal

⁵ By relying on the patentability of independent claim 1 in arguing for the patentability of dependent claims 8-11 Applicants do not mean to imply that Applicants agree with Examiner's rejection of claims 8-11. Rather, Applicants need go no further, at this time, to address the grounds of rejection further in view of Smith than the argument already advanced against the combination of Adams Jr., Eckert, and Tachauer.

quotations omitted). Accordingly, the Board should reverse Examiner's rejection of claims 48-51 and 55.

2. Examiner Has Not Shown a Motivation to Combine the *Four* Cited References.

Even assuming, arguendo, that Tachauer was a proper prior art reference, Examiner has not shown that one skilled in the art would be motivated to combine Adams Jr. with Tachauer and Smith et al. and finally with Emmanuel to produce the inventions of claims 48-51 and 55.⁶ Specifically, Examiner's statement concerning the motivation to combine Adams Jr. with Tachauer and with Smith et al. and with Emmanuel find no support in the record. Accordingly, the Board should reverse Examiner's rejection of claims 48-51 and 55.⁷

Examiner has failed to show that one skilled in the art would be motivated to combine Adams Jr. with anything gleaned from Tachauer. Examiner states that Tachauer teaches a "protective covering comprising a plurality of strips of masking material." (Final Office Action at 6.) But as was shown above, Tachauer is concerned with fastening membranes together with hook and loop fasteners so that the membranes can serve as, e.g., "roof membranes and building

⁶ As previous, Examiner summed up his basis for finding a motivation to combine in a single sentence:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Adam jr. et al to show the protective covering comprising a plurality of strips of masking material as taught by Tachauer et al, at least one piece of the masking material having at least one/all peripheral side portion extending significantly beneath a confronting surface of the frame, the side portions extending a predetermined distance beneath the confronting surfaces of the frame as taught by Smith et al, a glazing compound between the pane and the frame as taught by Emmanuel *because* having the covering made of a plurality of strips would enable easy covering of a large area, and the use of multiple smaller strips reduces the manufacturing and transportation cost associated with a large piece of covering, having the at least one/all peripheral side portion extending beneath a confronting surface of the frame would enable Adam Jr. et al's cover to hide the edges in grooves and thus reducing the precise manufacturing tolerance required of the cover, which would result in cost saving and guarantee covering of the exposed central portion of the pane, and having a glazing compound within the frame would enhance the securement of the frame to the pane as taught by Emmanuel.

(Final Office Action at 6-7 (emphasis added).)

⁷ By setting forth these bases for reversal of Examiner's rejection of claims 48-51 and 55, Applicants do not mean to imply that these are the only bases for reversal.

wrap materials.” (Tachauer at ¶ 3.) Contrary to Examiner’s assertions, Tachauer simply does not teach a “protective covering comprising a plurality of strips of masking material.”

Tachauer’s wide membranes are fundamentally different from the “strips of masking material” recited in claims 48-51 and 55 and further employ and require hook and loop type fasteners.

There is no teaching or suggestion in either reference that would lead the skilled artisan to combine them, and there is no teaching in Tachauer of the elimination of the fasteners.

Accordingly, Examiner has not shown that one skilled in the art would be motivated to combine Adams Jr. and Tachauer, and the Board should reverse the rejection of claims 48-51 and 55.

Moreover, even if Tachauer did teach a protective covering comprising a plurality of strips of masking material that did not require fasteners, Examiner’s conclusory statements concerning the advantages such a protective covering would provide demonstrate that Examiner has not based the rejection on the teachings of the cited reference but rather has fallen prey to the “subtle but powerful attraction of a hindsight-based obviousness analysis.” *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). Examiner concludes that “having the covering made of a plurality of strips would enable easy covering of a large area, and the use of multiple smaller strips reduces the manufacturing and transportation cost associated with a large piece of covering.” (Final Office Action at 6.) These advantages—easy covering of a large area and reduced cost—are clearly provided by embodiments of the invention of claim 48. But Examiner must show that one skilled in the art would have recognized those advantages in Tachauer, without the benefit of Applicants’ disclosure, and been motivated to combine them with Adams Jr. to produce the glazing assembly invention of claim 48. *See Dembiczak*, 175 F.3d at 999 (“Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat

patentability—the essence of hindsight.”). Tachauer itself certainly does not discuss such advantages. Examiner’s attempted showing amounts to nothing more than a “broad conclusory statement,” which the Federal Circuit has held does not suffice to establish motivation to combine. *Id.* Accordingly, because Examiner has failed to show that one skilled in the art would be motivated to combine Tachauer with Adams Jr., the Board should reverse the rejection of claims 48-51 and 55.

Examiner has not shown that one skilled in the art would be motivated to combine Adams Jr. with anything gleaned from Smith et al. Examiner contends that Smith et al. teaches “at least one piece of the masking material having at least one/all peripheral side portion extending significantly beneath a confronting surface of the frame” and “the side portions extending a predetermined distance beneath the confronting surfaces of the frame.” (Final Office Action at 6.) This contention finds no support in the record.

Smith et al. teaches that a “sacrificial glazing panel”⁸ 14 extends within an upper portion of a seal assembly 15 and that a lower portion of the seal assembly 15 is seated in frame 20. (*See* Smith at 3:48-51 & FIGS. 2-3.) But as is clear from Smith et al.’s disclosure, and as is even more clear from FIGS. 2-3, *the sacrificial glazing panel 14 does not extend within the frame 20.* (*Id.*) If anything, Smith et al. teaches away from the invention of claim 48. Smith et al. repeatedly refers to the difficulty associated with prior art sacrificial glazing systems in which panels were mounted to the frame. (*See, e.g., id.* at 1:28-36.) Moreover, in contrast to claim 48’s recitation of masking material that is “a *flexible* masking film,” Smith et al.’s sacrificial glazing panels are made of “[a]rylic or polycarbonate materials or other suitable transparent material”—material that is generally known to be rigid. Because Smith et al. teaches neither

⁸ Applicants do not concede that this is a “masking material” as recited in any of the claims pending in this case.

masking material extending beneath a confronting surface of a frame nor masking material that is a flexible masking film, Examiner has failed to show that one skilled in the art would be motivated to combine Adams Jr. with any teachings from Smith et al.

Further, the combination proposed by Examiner would introduce additional structure—namely, the wide membranes 100 of Tachauer with fasteners and the seal assembly 15 and the rigid sacrificial glazing panel 14 of Smith et al. Applicants submit that there is no motivation for the combination advanced by Examiner and that, even were the combination made, the invention of claims 48-51 and 55 would not be the result.

Emmanuel is cited for its teaching of a glazing compound connecting the frame to the pane. Applicants acknowledge this teaching of Emmanuel as old and submit that Emmanuel adds nothing that overcomes the deficiencies of the other references or their combination. Nothing in the cited combination further in view of Emmanuel deals with the relationship of the protective covering and the glazing compound as recited in claim 48. Accordingly, the Board should reverse the rejection of claims 48-51 and 55.

D. The Board Should Reverse Examiner's Rejection of Claim 56 as Obvious over Adams Jr. in View of Smith et al. in View of Emmanuel and Tachauer.

Examiner's basis for rejecting claim 56 is essentially the same as his basis for rejecting claims 48-51 and 55. Applicants submit that the Board should reverse the rejection of claim 56 for the same reasons as set forth in section C. Applicants above arguments regarding the deficiencies of each reference and their combination are equally applicable here. Examiner may not rely on Tachauer because Tachauer is non-analogous art. Moreover, Examiner's attempt to

show a motivation to combine the *four* cited references is faulty in at least three respects.⁹ First, as previously argued above, Tachauer simply does not teach a “covering comprising a plurality of strips of masking material,” so one skilled in the art would not find anything in Tachauer to combine with the other three references. Second, even if Tachauer did teach such a covering, Examiner engages in classic hindsight by contending that one skilled in the art would be motivated to combine Tachauer with Adams Jr. to achieve easy covering of a large area and reduced cost—two advantages provided by embodiments of claim 56. And third, the rigid sacrificial glazing panel of Smith et al. does not extend within the window frame, so one skilled in the art would not find anything in Smith et al. to combine with the other three references that would yield Applicant’s claimed inventions. Because of the impermissible reliance on Tachauer, the absence of motivation for the combination, and the failure of the combination (if permissible) to yield the inventions as claimed, the Board should reverse the rejection of claim 56.¹⁰

⁹ Examiner’s statement of motivation to combine the four cited references is as follows:

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Adams Jr. et al to show the covering comprising a plurality of strips of masking material as taught by Tachauer, glazing compound being located between the frame and the outer surface of the first pane but not between the frame and the outer surface of the second pane as taught by Emmanuel, the masking material extending beneath a confronting surface of the frame as taught by Smith et al *because* having the cover made of a plurality of strips as taught by Tachauer would enable the covering of a large area with small strips, and thus resulting in cost saving per easy of manufacturing and transporting of the covering material, and having the glazing compound only between the first panel and the frame but not the second pane and the frame would enhance the securing of the first panel to the frame as taught by Emmanuel, and having the masking material extending beneath a confronting surface of the frame would enable the complete coverage and protection of the window panes against external objects as taught by Smith et al.

(Final Office Action at 8 (emphasis added).)

¹⁰ By setting forth these bases for reversal of Examiner’s rejection of claim 56, Applicants do not mean to imply that these are the only bases for reversal.

E. The Board Should Reverse Examiner's Rejection of Claims 57-60 as Obvious over Adams Jr. in View of Smith et al., Emmanuel, and Tachauer as Applied to Claim 56, and Further in View of Kupec et al.

Because claims 57-60 depend from claim 56, and because claim 56 is nonobvious over the combination of Adams Jr., Smith et al., Emmanuel, and Tachauer, as demonstrated above, Examiner's rejection of claims 57-60 is improper. Applicants submit that the addition of Kupec et al. to the combination does not serve to meet any deficiencies of the combination previously noted by Applicants herein above. Accordingly, the Board should reverse the rejection and allow claims 57-60.¹¹

F. The Board Should Reverse Examiner's Rejection of Claim 62 as Obvious over Adams Jr. in View of Smith et al. in View of Emmanuel.

Examiner's rejection of claim 62 is improper. Examiner has not carried his burden of showing that one skilled in the art would be motivated to combine the three cited references so as to produce the invention of claim 62. Accordingly, the Board should reverse Examiner's rejection and allow claim 62.¹²

Examiner has not shown that one skilled in the art would be motivated to combine Adams Jr. and Emmanuel with any teachings from Smith et al. related to masking material extending beneath a confronting surface of a window frame. Examiner concedes that Adams Jr. does not teach a masking material extending beneath a confronting surface of a frame. And once again, Examiner contends that Smith et al. teaches "having the masking material extending beneath a confronting surface of the frame." (Final Office Action at 10.) But as was shown

¹¹ By relying on the patentability of independent claim 56 in arguing for the patentability of dependent claims 57-60 Applicants do not mean to imply that Applicants agree with Examiner's rejection of claims 57-60.

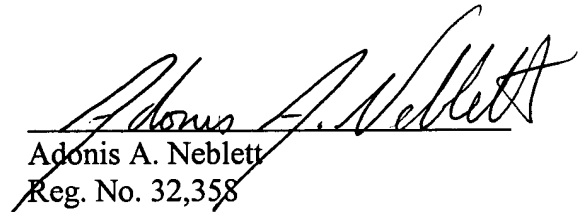
¹² By setting forth these bases for reversal of Examiner's rejection of claim 62, Applicants do not mean to imply that these are the only bases for reversal.

above in section C, Smith et al.'s rigid "sacrificial glazing panel" 14 clearly does not extend beneath a confronting surface of the "frame" 20. Rather, Smith et al.'s sacrificial glazing panel 14 extends within a "seal assembly" 15 (not an element of the subject claim), which, as seen in FIGS. 2-3, has a portion external to the frame 20 for receiving the sacrificial glazing panel 14 and a portion that is seated in a frame 20. Because Smith et al. teaches neither masking material extending beneath a confronting surface of a frame nor masking material that is a flexible masking film, Examiner has failed to show that one skilled in the art would be motivated to combine Adams Jr. with any teachings from Smith et al. Accordingly, the Board should reverse the rejection of claim 62.

Based on the foregoing, the Board should reverse the rejection of claims 1, 6, 8-12, 48-51, and 55-62.

Respectfully submitted,

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CLAIMS APPENDIX

1. A transparent window pane having first and second generally-opposed major surfaces, the transparent pane being sized and shaped to be mounted in a frame configured to receive at least one edge of the pane, the transparent pane having a removable protective covering comprising a plurality of strips of masking material that are disposed over a central portion of said first surface and that extend across a length of said first surface or across a width of said first surface, said central portion spanning at least 70% of said first surface, said first surface having an unmasked peripheral apron, the protective covering having readily accessible means for removing the protective covering from the window pane, wherein the masking material is a masking film that is transparent or translucent, wherein the strips of transparent or translucent masking film are disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip, such that the overlapped strips of transparent or translucent masking film define a plurality of exposed lateral edges that form said readily accessible means for removing the protective covering from the window pane, wherein said plurality of sequentially overlapped strips of masking material are each adhered to said first major surface by a masking adhesive, wherein the overlapped strips are affixed to one another, and wherein the overlapped strips are affixed to one another by being adhesively joined.

6. The transparent pane of claim 1 wherein the unmasked apron extends between an outer periphery of said protective covering and an outer periphery of the pane.

8. The transparent pane of claim 1 wherein said protective covering is sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame when the pane is mounted.

9. The transparent pane of claim 8 wherein said peripheral side portion of the protective covering does not extend so far beneath said confronting surface of the frame as to engage glazing compound between the frame and the pane.

10. The transparent pane of claim 1 wherein said protective covering is sized, shaped, and positioned such that all peripheral side portions of the protective covering extend beneath confronting surfaces of the frame when the pane is mounted.

11. The transparent pane of claim 10 wherein said peripheral side portions of the protective covering do not extend so far beneath said confronting surfaces of the frame as to engage glazing compound between the frame and the pane.

12. The transparent pane of claim 1 wherein the pane is part of a multiple-pane insulating glass unit.

48. A glazing assembly comprising a transparent pane and a frame to which the pane is mounted, wherein the frame receives an edge of the pane, and wherein the assembly includes glazing compound between the frame and the pane, the transparent pane having first and second

generally-opposed major surfaces, the transparent pane having a protective covering disposed over a portion of said first surface, wherein the protective covering comprises a plurality of strips of masking material, said first surface having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the pane, the protective covering comprising at least one piece of masking material, wherein the masking material is a flexible masking film and is sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame but does not extend so far beneath the frame as to engage the glazing compound.

49. The glazing assembly of claim 48 wherein the pane is mounted such that all edges of the pane are received in the frame.

50. The glazing assembly of claim 49 wherein said protective covering is sized, shaped, and positioned such that all peripheral side portions of the protective covering extend beneath confronting surfaces of the frame.

51. The glazing assembly of claim 50 wherein said peripheral side portions extend a predetermined distance beneath said confronting surfaces of the frame.

55. The glazing assembly of claim 48 wherein the pane is part of a multiple-pane insulating glass unit.

56. A glazing assembly comprising an insulating glass unit and a frame to which the insulating glass unit is mounted, the insulating glass unit comprising first and second panes each having generally-opposed inner and outer surfaces, the first and second panes each having at least one edge received in the frame, wherein glazing compound is located between the frame and the outer surface of the first pane but not between the frame and outer surface of the second pane, and wherein a protective covering is disposed over a portion of the outer surface of the second pane, wherein the protective covering comprises a plurality of strips of masking material, the outer surface of the second pane having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the second pane, the protective covering comprising at least one piece of masking material, wherein the masking material is a flexible masking film and is sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame.

57. The glazing assembly of claim 56 wherein the protective covering is provided with at least one tab or extension to facilitate removing the protective covering.

58. The glazing assembly of claim 57 wherein said at least one peripheral side portion of the protective covering extends a predetermined distance beneath said confronting surface of the frame.

59. The glazing assembly of claim 58 wherein said predetermined distance is at least about 1/16 inch.

60. The transparent pane of claim 59 wherein said predetermined distance is about 1/8 inch.

61. A transparent window pane having a square or rectangular shape with four sides and having first and second generally-opposed major surfaces, the transparent pane being sized and shaped to be mounted in a frame configured to receive at least one edge of the pane, the transparent pane having a removable protective covering comprising a plurality of strips of masking material disposed over a central portion of said first surface, said central portion spanning at least 70% of said first surface, said first surface having an unmasked peripheral apron, the protective covering having readily accessible means for removing the protective covering from the window pane, wherein said plurality of strips of masking material are adhered to said first major surface by a masking adhesive, wherein each strip of masking material has a longitudinal axis and lateral edges that are parallel to two sides of the pane and perpendicular to the other two sides of the pane, wherein the masking material is a masking film that is transparent or translucent, wherein the strips of transparent or translucent masking film are disposed in a sequentially overlapping fashion with each subsequent strip overlapping a portion of a preceding strip such that a plurality of the strips each have a concealed lateral edge covered by an adjacent strip and such that the overlapped strips of transparent or translucent masking film define a plurality of exposed lateral edges that form said readily accessible means for removing the protective covering from the window pane, wherein the overlapped strips are affixed to one another, and wherein the overlapped strips are affixed to one another by being adhesively joined.

62. A glazing assembly comprising a transparent pane and a frame to which the pane is mounted, wherein the frame comprises vinyl-covered wood or has a tubular construction of metal or metal alloy, wherein the frame receives an edge of the pane, and wherein the assembly includes glazing compound between the frame and the pane, the transparent pane having first and second generally-opposed major surfaces, the transparent pane having a protective covering disposed over a portion of said first surface, said first surface having an unmasked apron extending between an outer periphery of the protective covering and an outer periphery of the pane, the protective covering comprising at least one piece of masking material, wherein the masking material is a flexible masking film and is sized, shaped, and positioned such that at least one peripheral side portion of the protective covering extends beneath a confronting surface of the frame but does not extend so far beneath the frame as to engage the glazing compound.

EVIDENCE APPENDIX

1. U.S. Patent No. 5,866,260 to Adams Jr., first cited by Examiner in an Office Action dated May 9, 2003.
2. U.S. Patent No. 3,837,949 to Eckart, first cited by Examiner in an Office Action dated February 25, 2004.
3. U.S. Publication No. 2003/0070391 to Tachauer, first cited by Examiner in an Office Action dated May 9, 2003.
4. U.S. Patent No. 5,735,089 to Smith et al., first cited by Examiner in an Office Action dated May 9, 2003.
5. U.S. Patent No. 5,836,119 to Emmanuel, first cited by Examiner in an Office Action dated May 9, 2003.
6. U.S. Patent No. 2,672,122 to Kupec et al., first cited by Examiner in an Office Action dated May 9, 2003.

RELATED PROCEEDINGS APPENDIX

None.

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